

ABSTRACT OF THE DISCLOSURE

MULTILAYER FLUID CONDUITS

Multilayer fluid conduits are formed by adhering to a tubular outer surface of a metal pipe, a thermoplastic outer layer. The outer layer permits ends of the multilayer conduit to be joined together in leak-proof fluid conduit systems simply by adhering the conduit ends with compatible thermoplastic fittings. For fire protection systems, the preferred metal is steel, the preferred thermoplastic is CPVC and the preferred adhesive is heat activated. The adhesive coated metal pipe is preheated and the CPVC is extruded onto the outer surface of the heated metal pipe. Through the use of fire resistive CPVC, the multilayer conduit systems of the present invention can be installed in more severe fire threat areas than can existing, all plastic piping, including all CPVC piping systems. The conduit is assembled into systems on site simply by cutting and direct bonding with ordinary, all plastic fittings using appropriate bonding agents such as solvent based adhesives. CPVC fittings are preferred for fire protection systems.